



Amy G. Rabinowitz
Assistant General Counsel

August 5, 2005

Mary L. Cottrell, Secretary
Department of Telecommunications and Energy
One South Station
Boston, MA 02110

Re: D.T.E. 04-116

Dear Secretary Cottrell:

On behalf of Massachusetts Electric Company and Nantucket Electric Company, I am enclosing our response to the Department's revised information request DTE-LDC 5-1.

Thank you very much for your time and attention to this matter.

Very truly yours,

Amy G. Rabinowitz

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DTE-LDC 5-1Request:

Please refer to the alternative formula below for the Problem Circuit Remediation Index ("PCRI").

$$(8760\text{-Circuit SAIDI}) / 8760$$

Comment on the advantages and disadvantages of employing this formula over the previous formula as expressed in Attachment A of DTE-LDC 4-1 through DTE-LDC 4-6.

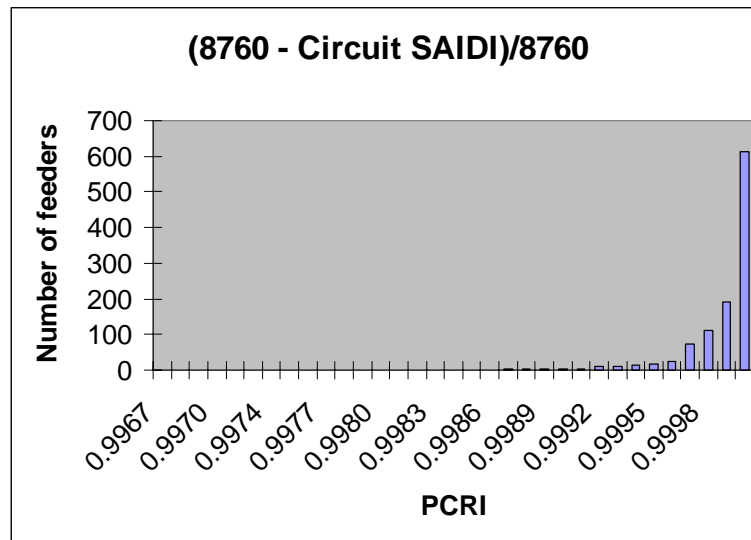
Response:

The Company has interpreted this request to mean (8760 – circuit SAIDI in hours)/8760 since 8760 is the number of hours in a non-leap year. Calculating the metric for the 2001 information submitted in LDC 1-X, finds the PCRI values range from 0.9733 to 1.0 with a mean of 0.99977 and a standard deviation of 0.00093. The mean plus one standard deviation is 0.99885. Using the proposed methodology, ten circuits are identified in 2001, thirty-eight circuits identified in 2002 and one hundred and thirty four circuits in 2003. The table below shows statistics about the chosen feeders. The minimum SAIDI level

	2001	2002	2003
mean (μ)	0.99977	0.99969	0.99985
stdev (σ)	0.00093	0.00075	0.00024
$\mu + 1\sigma$	0.99885	0.99894	0.99960
# Feeders	10	38	134
Minimum SAIDI	12.98	13.72	3.07

This wide variation in the chosen number of feeders and minimum SAIDI level occurs because the data is not normally distributed, otherwise known as not Gaussian. The fact that the data is not Gaussian means that using the mean plus one standard deviation is not appropriate. The figure below shows the data distribution for the proposed PCRI. No "bell" shaped curve is visible, instead a skewed data set is seen. Further analysis shows this data to be more closely represented as a log-normal distribution. This means that the use of 1 standard deviation is not valid because the underlying data set does not lend itself to the concept of standard deviation in normal space.

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As discussed in the Company's previous response to LDC 5-1, it appears that the DTE is attempting to find a methodology for identifying pockets of poor performance and a mechanism for penalizing utilities for this poor performance. The Company suggests that a slightly modified version of the current mechanism be used to identify the worst performing circuits. The current definition reads:

"Poor Performing Circuit" will mean any distribution feeder that:

- (i) has obtained a circuit SAIDI or SAIFI value for a reporting year that is among the highest (worst) ten percent of the Company's feeders for any two consecutive reporting years; or
- (ii) has sustained a circuit SAIDI or SAIFI value for a reporting year that is more than 300 percent greater than the system average of all feeders in any two consecutive reporting years.

The Company proposes to modify the definition to develop the worst performing feeder list excluding major event days. This change will reduce the number of feeders that are identified solely due to major events. The required remediation activities for such events are often quite different than those required for remediation of "day to day" events and in some cases the remediation will have occurred during the major event with no follow-up work required.

An additional proposed modification would be to change the time frame to "...for any three consecutive reporting years." Since the worst performing circuits can only be identified after year end for the first year, and plans to correct a reliability situation are developed in the second year, with the budgeting and actual work plan occurring in the third year, improvements in reliability metrics would not be expected until the third year.

The goal of service quality plans should be to ensure a reasonable level of reliability for a reasonable cost for most customers. Mandating measures that unfairly weight one

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customer over another seems to be at odds with the Commission's mission. Instead, reviewing performance on a system level is more in line with appropriate regulation. Taking this approach will allow utilities to develop plans that improve reliability across the system in the most economical way possible.

The Company believes that penalties should not be levied at a feeder level because doing so will reduce the effectiveness of the Company's system wide reliability program. It will force spending in suboptimal ways to address areas on a different time scale than they would otherwise be addressed, potentially forcing the implementation of short-term solutions that in the long term will be more costly and less effective.

Prepared by or under the supervision of:

Cheryl A. Warren